

**REMARKS****Introductory Comments:**

Claims 1-23 are pending in the application. Claims 1-6, 8, 13, 15, 19-20, and 23, are rejected under 35 U.S.C. 103(a) as being obvious over Madau et al. (US Patent 6314329) in view of Winner et al. (6810311). Claims 7 and 17-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Madau et al. and Winner et al. as applied to claim 1 above, and further in view of Schiffmann et al. (US Patent 6038495). Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Madau et al. and Winner et al. as applied to claim 1 above, and further in view of Weaver et al. (6,600,985) and Bustgens et al. (6,718,279). Claim 21 is rejected under 35 U.S.C. §103(a) as being unpatentable over Madau et al. and Winner et al. as applied to claim 1 above, and further in view of Weaver et al. and Bustgens et al. and Pastor et al. (5,446,658). Claim 22 is rejected under 35 U.S.C. §103(a) as being unpatentable over Madau et al. and Winner et al. as applied to claim 1 above, and further in view of Weaver et al. and Schiffman (6,038,495). Claims 14 and 16 are rejected under 35 U.S.C. §103(a) as being unpatentable over Madau et al., Schiffmann et al., and Winner et al. and further in view of Winner et al. (US Patent 6704631).

**In Response To The 35 U.S.C. 103 Claim Rejections:**

The Office Action rejects claims 1-6, 8, 13, 15, 19-20, and 23 because, according to the Office Action, Madau et al. disclose a sensor offset correction method for a vehicle comprising: generating a first offset correction signal for a vehicle dynamic sensor at a sensor power-up (see the abstract), and generating a second offset correction signal for said vehicle dynamic sensor when the vehicle is moving; and correcting vehicle dynamic sensor in response to at least one of said first offset correction signal and second offset correction signal (see column 1, lines 35-55). The Office Action recognizes that Madau et al. do not disclose averaging maximum and minimum of offset valves acquired during vehicle operation.

However, the Office Action alleges Winner et al. disclose averaging maximum and a minimum of offset valves acquired during vehicle operation and using average of maximum and minimum as first offset correction signal (see columns 2-3, lines 40-17; columns 5-6, lines 62-63; and columns 10-11, lines 20-63).

The Applicants submit that claims 1-6, 8, 13, 15, 19-20, and 23 are new and non-obvious because the claims and the prior art differ. Claim 1 includes generating an offset correction signal at a sensor power up and averaging a maximum and minimum of offset values acquired during vehicle operation *in response to the vehicle moving prior to completion of the power-up*. In other words, if the vehicle is still moving during the power-up, the average of max and min offset values acquired during vehicle operation replace the current offset correction signal generated during power-up. In contrast, Madau describes a typical compensation algorithm for initializing a yaw rate sensor's zero point offset. This compensation algorithm consists of a feedback loop measuring an ignition activation sensor offset and replacing the value of a manufacturing predetermined maximum or minimum for a sensor if the ignition activation sensor offset is outside of the maximum or minimum (and recalculating an average of the new maximum and minimum). More importantly, Madau does not disclose or suggest operations as a function of the vehicle moving prior to completion of power up. Further, Madau does not address adjusting offsets generated through vehicle operation, and merely attempts to correct for offsets due to manufacturing or sensor activation.

According to the Office Action, Winner includes generating an offset value through averaging maximum and minimum of offset values acquired during vehicle operation. However, Winner does not address the problem of averaging a maximum and minimum of offset values acquired during vehicle operation in response to the vehicle moving prior to completion of the power-up (as do the claims) and merely inputs histogram values of the last ignition cycle as initialization values when starting the vehicle. (Column 10, Lines 31-32.) Therefore, the Applicants believe that the 103(a) rejection is traversed because the claims and the prior art differ. Claims 7, 9-12, 14, 16-18, and 21-22 depend from claims 1, 3, and 20 and are believed to be allowable for at least this reason.

Further, it would not have been obvious to combine the references as the Office Action proposes. "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination." *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1672, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). Even if all the elements of Applicant's invention are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to combine the teachings of the references to arrive at the claimed invention.

Madau is directed to a typical system for initializing a yaw rate sensor zero point offset. More importantly, Madau does not disclose or suggest that the system thereof would be

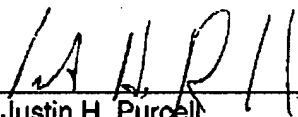
in any way beneficial to an adaptive offset correction system compensating for sensor offsets responsive to the vehicle moving prior to completion of power-up. Further, Winner is directed to a histogram method for determining sensor offset values. However, Winner does not suggest (nor does Madau) that combining the histogram method with the ignition offset method of Madau would be in any way beneficial for correcting for sensor offsets. Neither Madau or Winner teach or suggest such a combination. Therefore, because no teaching or suggestion is found in any of the references for power-up compensation of offsets in response to the vehicle moving prior to completion of the power-up, claims 1-6, 8, 13, 15, 19-20, and 23 are believed to be allowable. Claims 7, 9-12, 14, 16-18, and 21-22 depend from claims 1, 3, and 20 and are believed to be allowable for at least this reason.

**Conclusions:**

In view of the aforementioned remarks, it is respectfully submitted that all pending claims are in a condition for allowance. A notice of allowability is therefore respectfully solicited. Please charge any fees required in the filing of this amendment to Deposit Account 06-1510 if insufficient funds use 06-1505. Should the Examiner have any further questions or comments please contact the undersigned.

Respectfully submitted,

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